Application No. 10/691,570

Reply to Office Action of April 12, 2010

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-39 (Cancelled).

Claim 40 (Currently Amended): A liquid injector for injecting at least a contrast

medium into a subject whose fluoroscopic image is to be captured by an imaging diagnostic

apparatus, wherein said contrast medium is available in a plurality of types having different

concentrations of an effective component, said liquid injector comprising:

a liquid injection mechanism for injecting at least said contrast medium into said

subject;

an injection control means for controlling operation of said liquid injection

mechanism under [[the]] operating conditions whose data have been read;

a display/touch panel adapted to display a plurality of body sections in schematic

images of shapes of a human body and accept selection of one of said body sections when

one of the displayed plurality of body sections is touched, wherein when one of the body

sections is selected, said display/touch panel is further adapted to display at least one of a

plurality of regions to be imaged of the human body in schematic images of shapes of regions

and accept selection of one of said regions to be imaged when one of the displayed regions to

be imaged is touched; and

said injection control means reading out, from a condition storage device, a base-

operation condition including a predetermined injection time for the injection and a necessary

dose of effective component of the contrast medium per unit weight of the subject, each of

which is for the selected region, and a concentration of the effective component, for

calculating a necessary volume of the contrast medium based on the read out necessary dose

of effective component per unit weight and concentration of the effective component, for

2

calculating an injection pattern of the injection time and rate based on the calculated necessary volume of the contrast medium and the base-operation condition, and for performing the injection of said contrast medium based on the calculated injection pattern by controlling the operation of said liquid injection mechanism,

wherein the calculated injection pattern for each injection of said contrast medium into a subject comprises a variable injection rate and the predetermined injection time, wherein for each injection of said contrast medium into a subject the variable injection rate varies based on body weight of the subject, and wherein the predetermined injection time is unchanged for each said injection of said contrast medium into a subject.

Claim 41 (Currently Amended): A liquid injector according to claim 40, wherein said liquid injection mechanism comprises a contrast medium injection mechanism for injecting a contrast medium and a solution injection mechanism for injecting a saline solution,

said base-operation condition stored in said condition storage device comprises a pattern whereby the injection of the contrast medium and the injection of the saline solution are interlinked for the selected region to be imaged, and

said injection control means is for reading out the base-pattern in which the injection of the contrast medium and the injection of the saline solution are interlinked, and for performing the interlinked injection of said contrast medium and said saline solution by controlling said contrast medium injection mechanism and said solution injection mechanism.

Claim 42-44 (Cancelled).

Claim 45 (Previously Presented): A liquid injector according to claim 40, wherein, said base-operation condition including an injection time for the selected region is modified based on an imaging item.

Claim 46 (Previously Presented): A liquid injector according to claim 45, wherein, said imaging item is selected from the types of the imaging diagnostic apparatus and imaging rates.

Claim 47 (Previously Presented): A liquid injector according to claim 41, further comprising:

medium loading means for removably loading an information storage medium which stores at least one of the data of body items for said subject and the data of imaging items;

wherein at least one of the data of body items and the data of imaging items is read out from the loaded information storage medium.

Claim 48 (Previously Presented): A liquid injector according to claim 41, wherein at least one of the data of body items and the data of imaging items is read out on-line from an external database device which stores at least one of the data of body items for said subject and the data of imaging items.

Claim 49 (Previously Presented): A liquid injector according to claim 40, wherein said condition storage means stores, as said base-operation condition, data of a variable pattern in which an injection rate of said contrast medium is changed with time to keep said fluoroscopic image in a predetermined contrast range.